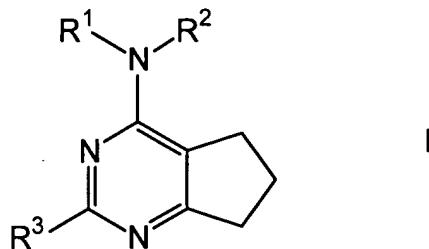


AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. - 11. (Cancelled).
12. (New) A compound of formula I,



wherein one of R¹ and R² is selected from the group consisting of (C₁-C₈)-alkyl, wherein the (C₁-C₈)-alkyl is unsubstituted or substituted by at least one identical or different substituents chosen from hydroxyl, (C₁-C₄)-alkoxy, (C₁-C₄)-alkyl-S(O)_m-, unsubstituted or substituted phenyl, unsubstituted or substituted naphthyl and unsubstituted or substituted pyridyl; and (C₃-C₉)-cycloalkyl, wherein the (C₃-C₉)-cycloalkyl is unsubstituted or substituted by at least one identical or different substituents chosen from (C₁-C₄)-alkyl, hydroxyl, amino and unsubstituted or substituted benzyl, and wherein the other one of R¹ and R² is hydrogen, and wherein the radicals phenyl, naphthyl, pyridyl and benzyl contained in the radicals R¹ or R² are unsubstituted or substituted in the aromatic ring by at least one identical or different substituents chosen from halogen, (C₁-C₄)-alkyl, phenyl, CF₃, NO₂, OH, -O-(C₁-C₄)-alkyl, -O-(C₂-C₄)-alkyl-O-(C₁-C₄)-alkyl, (C₁-C₂)-alkylenedioxy, NH₂, -NH-(C₁-C₄)-alkyl, -N((C₁-C₄)-alkyl)₂, -NH-CHO, -NH-CO-(C₁-C₄)-alkyl, -CN, -CO-NH₂, -CO-

NH-(C₁-C₄)-alkyl, -CO-N((C₁-C₄)-alkyl)₂, -CO-OH, -CO-O-(C₁-C₄)-alkyl, -CHO and -CO-(C₁-C₄)-alkyl,

wherein R³ is aryl but cannot be unsubstituted phenyl;

wherein aryl is chosen from phenyl, naphthyl and heteroaryl, and wherein said phenyl, naphthyl, and heteroaryl is unsubstituted or substituted by at least one identical or different substituents chosen from halogen, (C₁-C₄)-alkyl, phenyl, CF₃, NO₂, OH, -O-(C₁-C₄)-alkyl, -O-(C₂-C₄)-alkyl-O-(C₁-C₄)-alkyl, (C₁-C₂)-alkylenedioxy, NH₂, -NH-(C₁-C₄)-alkyl, -N((C₁-C₄)-alkyl)₂, -NH-CHO, -NH-CO-(C₁-C₄)-alkyl, -CN, -CO-NH₂, -CO-NH-(C₁-C₄)-alkyl, -CO-N((C₁-C₄)-alkyl)₂, -CO-OH, -CO-O-(C₁-C₄)-alkyl, -CHO and -CO-(C₁-C₄)-alkyl;

wherein heteroaryl is chosen from a radical of a monocyclic 5-membered aromatic heterocycle, a radical of a monocyclic 6-membered aromatic heterocycle, a radical of a bicyclic 8-membered aromatic heterocycle, a radical of a bicyclic 9-membered aromatic heterocycle, and a radical of a bicyclic 10-membered aromatic heterocycle, each of which contain at least one identical or different ring heteroatoms chosen from N, O and S; and

m is 0, 1 or 2;

or a salt thereof, in any stereoisomeric form, or a mixture of any such compounds in any ratio.

13. (New) The compound as claimed in claim 12, wherein one of R¹ and R² is cyclopentyl or cyclohexyl, each of which is unsubstituted or substituted by at least one

identical or different substituents chosen from (C₁-C₄)-alkyl, hydroxyl, amino, and unsubstituted or substituted benzyl,

or a salt thereof, in any stereoisomeric form, or a mixture of any such compounds in any ratio.

14. (New) The compound as claimed in claim 12, wherein one of R¹ and R² is (C₃-C₉)-cycloakyl which is unsubstituted or substituted by at least one identical or different substituent chosen from (C₁-C₄)-alkyl, hydroxyl, and amino,

or a salt thereof, in any stereoisomeric form, or a mixture of any such compounds in any ratio.

15. (New) The compound as claimed in claim 12, wherein one of R¹ and R² is (C₃-C₉)-cycloalkyl which is unsubstituted or substituted by one or two identical or different substituents chosen from (C₁-C₄)-alkyl, hydroxyl, amino, and unsubstituted or substituted benzyl,

or a salt thereof, in any stereoisomeric form, or a mixture of any such compounds in any ratio.

16. (New) The compound as claimed in claim 15, wherein one of R¹ and R² is (C₃-C₉)-cycloalkyl which is substituted by a hydroxyl group,

or a salt thereof, in any stereoisomeric form, or a mixture of any such compounds in any ratio.

17. (New) The compound as claimed in claim 16, wherein one of R¹ and R² is cyclopentyl or cyclohexyl which is substituted by a hydroxyl group, or a salt thereof, in any stereoisomeric form, or a mixture of any such compounds in any ratio.

18. (New) The compound as claimed in claim 17, wherein one of R¹ and R² is cyclohexyl which is substituted by a hydroxyl group, or a salt thereof, in any stereoisomeric form, or a mixture of any such compounds in any ratio.

19. (New) The compound as claimed in claim 18, wherein one of R¹ and R² is 4-hydroxycyclohexyl, or a salt thereof, in any stereoisomeric form, or a mixture of any such compounds in any ratio.

20. (New) The compound as claimed in claim 12, wherein one of R¹ and R² is (C₁-C₈)-alkyl which is unsubstituted or substituted by at least one identical or different substituent chosen from hydroxyl, (C₁-C₄)-alkoxy, (C₁-C₄)-alkyl-S(O)_m-, unsubstituted or substituted phenyl, and unsubstituted or substituted naphthyl, or a salt thereof, in any stereoisomeric form, or a mixture of any such compounds in any ratio.

21. (New) The compound as claimed in claim 12, wherein one of R¹ and R² is (C₁-C₈)-alkyl which is unsubstituted or substituted by one or two identical or different substituents chosen from hydroxyl, (C₁-C₄)-alkoxy, (C₁-C₄)-alkyl-S(O)_m-, unsubstituted or substituted phenyl and unsubstituted and substituted naphthyl, or a salt thereof, in any stereoisomeric form, or a mixture of any such compounds in any ratio.

22. (New) The compound as claimed in claim 12, wherein R³ is substituted phenyl, or a salt thereof, in any stereoisomeric form, or a mixture of any such compounds in any ratio.

23. (New) The compound as claimed in claim 12, wherein R³ is phenyl substituted by one or two substituents chosen from halogen and (C₁-C₄)-alkyl, or a salt thereof, in any stereoisomeric form, or a mixture of any such compounds in any ratio.

24. (New) The compound as claimed in claim 12, which is chosen from 2-(4-chlorophenyl)-4-cyclopentylamino-6,7-dihydro-5H-cyclopenta[d]pyrimidine, 2-(3,5-dichlorophenyl)-4-(trans-4-hydroxycyclohexylamino)-6,7-dihydro-5H-cyclopenta[d]pyrimidine, 2-(3-chlorophenyl)-4-cyclopentylamino-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(4-chlorophenyl)-4-(trans-4-hydroxycyclohexylamino)-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(4-methylphenyl)-4-cyclopentylamino-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(4-methylphenyl)-4-cyclohexylamino-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(4-methylphenyl)-4-(trans-4-hydroxycyclohexylamino)-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(3,5-dichlorophenyl)-4-cyclopentylamino-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(4-methoxyphenyl)-4-cyclopentylamino-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(4-methoxyphenyl)-4-cyclohexylamino-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(3,4-dimethoxyphenyl)-4-cyclopentylamino-6,7-dihydro-5H-cyclopenta[d]pyrimidine, and

2-(3,4-dimethoxyphenyl)-4-cyclohexylamino-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

or a salt thereof.

25. (New) The compound as claimed in claim 12, which is chosen from

2-(3,5-dichlorophenyl)-4-(trans-4-hydroxycyclohexylamino)-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(4-chlorophenyl)-4-(trans-4-hydroxycyclohexylamino)-6,7-dihydro-5H-cyclopenta[d]pyrimidine, and

2-(4-methylphenyl)-4-(trans-4-hydroxycyclohexylamino)-6,7-dihydro-5H-cyclopenta[d]pyrimidine,
or a salt thereof.

26. (New) The compound as claimed in claim 12, which is chosen from

2-(4-chlorophenyl)-4-(2-hydroxyethylamino)-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(4-chlorophenyl)-4-((3-pyridylmethyl)amino)-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(3-chlorophenyl)-4-(2-hydroxyethylamino)-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(3-chlorophenyl)-4-((3-pyridylmethyl)amino)-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(3-chlorophenyl)-4-(2-(3-methoxyphenyl)-ethylamino)-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(4-chlorophenyl)-4-(2-(3-methoxyphenyl)-ethylamino)-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(4-chlorophenyl)-4-(2-methoxyethylamino)-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(4-chlorophenyl)-4-isobutylamino-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(4-chlorophenyl)-4-butylamino-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(3-chlorophenyl)-4-butylamino-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(4-methylphenyl)-4-(2-hydroxyethylamino)-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(4-methylphenyl)-4-butylamino-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(4-methylphenyl)-4-((3-pyridylmethyl)amino)-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(3,5-dichlorophenyl)-4-(4-hydroxybutylamino)-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(3,5-dichlorophenyl)-4-butylamino-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(3,5-dichlorophenyl)-4-((3-pyridylmethyl)amino)-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(4-methoxyphenyl)-4-(3-hydroxypropylamino)-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(4-methoxyphenyl)-4-butylamino-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(4-methoxyphenyl)-4-(2-(2-chlorophenyl)-ethylamino)-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(3,4-dimethoxyphenyl)-4-(3-methoxypropylamino)-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(3,4-dimethoxyphenyl)-4-butylamino-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

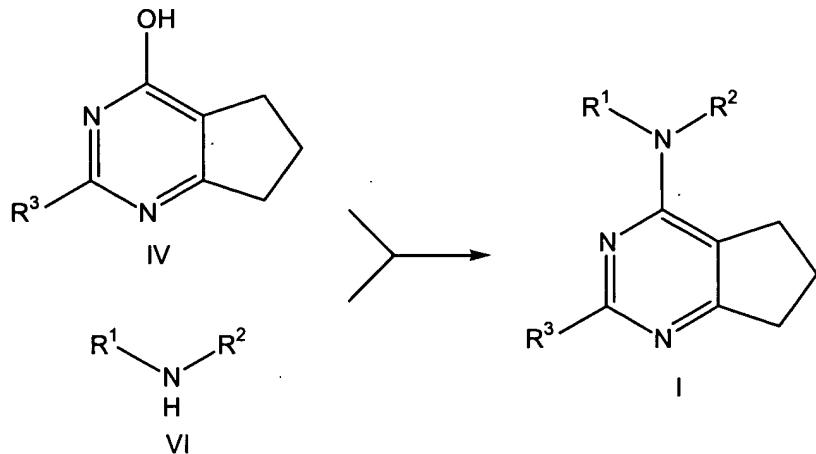
2-(4-cyanophenyl)-4-(3-methoxypropylamino)-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

2-(4-cyanophenyl)-4-benzylamino-6,7-dihydro-5H-cyclopenta[d]pyrimidine, and

2-(4-cyanophenyl)-4-((3-pyridylmethyl)amino)-6,7-dihydro-5H-cyclopenta[d]pyrimidine,

or a salt thereof.

27. (New) A process for the preparation of compounds as claimed in claim 12, which comprises activating a 4-hydroxypyrimidine of the formula IV and then reacting it with an amino of the formula VI,



wherein R¹, R² and R³ are defined as in claim 12.

28. (New) A pharmaceutical composition comprising at least one of the compound chosen from the compounds as claimed in claim 12 and their physiologically tolerable salts, and a pharmaceutically tolerable carrier.

29. (New) A method of activating soluble guanylate cyclase comprising comprising addition of an effective amount of at least one compound chosen from the compounds as claimed in claim 12 and their physiologically tolerable salts.

30. (New) A method of treating or preventing cardiovascular disorders, endothelial dysfunction, diastolic dysfunction, atherosclerosis, high blood pressure,

angina pectoris, thromboses, restenoses, myocardial infarct, strokes, cardiac insufficiency, pulmonary hypertension, erectile dysfunction, bronchial asthma, chronic renal insufficiency, diabetes or liver cirrhosis or for improving restricted learning capacity or memory power, comprising administering to a patient in need thereof an effective amount of at least one compound chosen from the compounds as claimed in claim 12 and their physiologically tolerable salts.

31. (New) A method of activating soluble guanylate cyclase comprising administering to a patient in need thereof an effective amount of at least one compound chosen from the compounds as claimed in claim 12 and their physiologically tolerable salts.